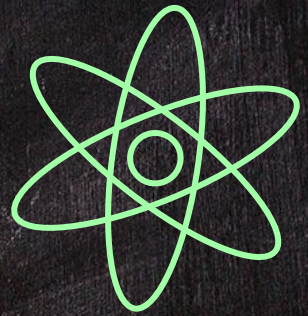
02.

Math

Eureka Math



Eureka Math Overview

Components of a Eureka Math Lesson

Each lesson in A Story of Units is comprised of four critical components.

Together they promote balanced and rigorous instruction.

- Fact Fluency (~10 min.)
- Application problem (~10 min.)
- Concept Development
  - Including the problem set) (~30 min.)
- Debrief
  - Including the exit ticket (~10 min.)

Eureka Math is...

- ALIGNED
  To standards
- COHERENT
  A story that builds
- COMPREHENSIVE
  Print, digital, and support for parents

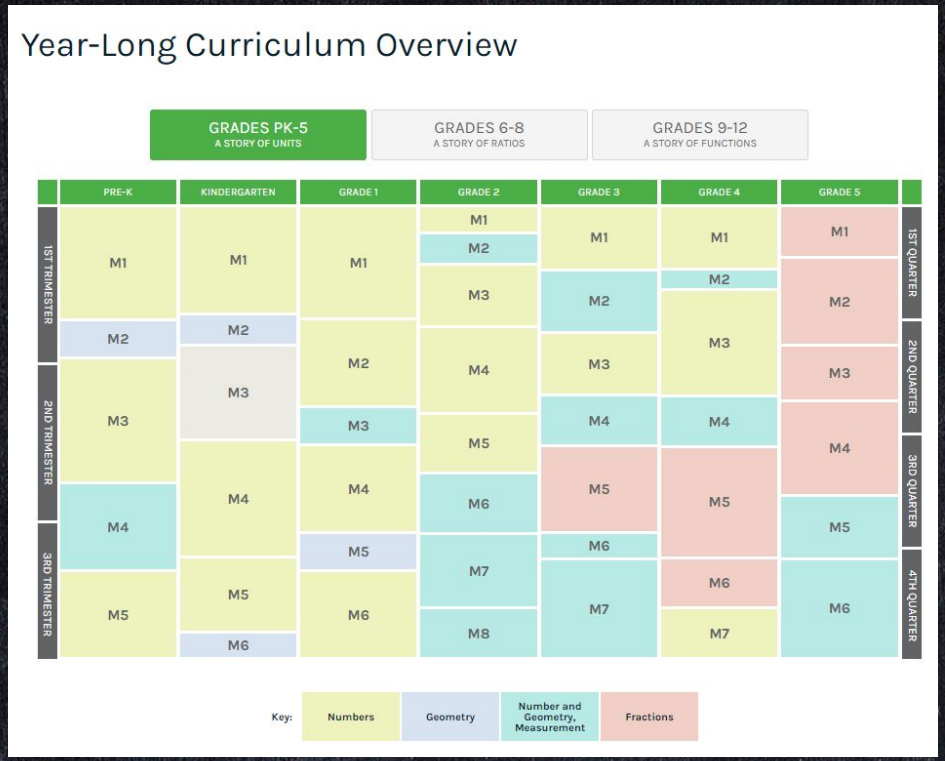
Eureka Math Standards by Marking Period 2024-2025

Number	Shapes	Number & Geometry, Measurement	Fractions	Ratios & Proportional Relationships	Expressions & Equations	Statistics & Probability

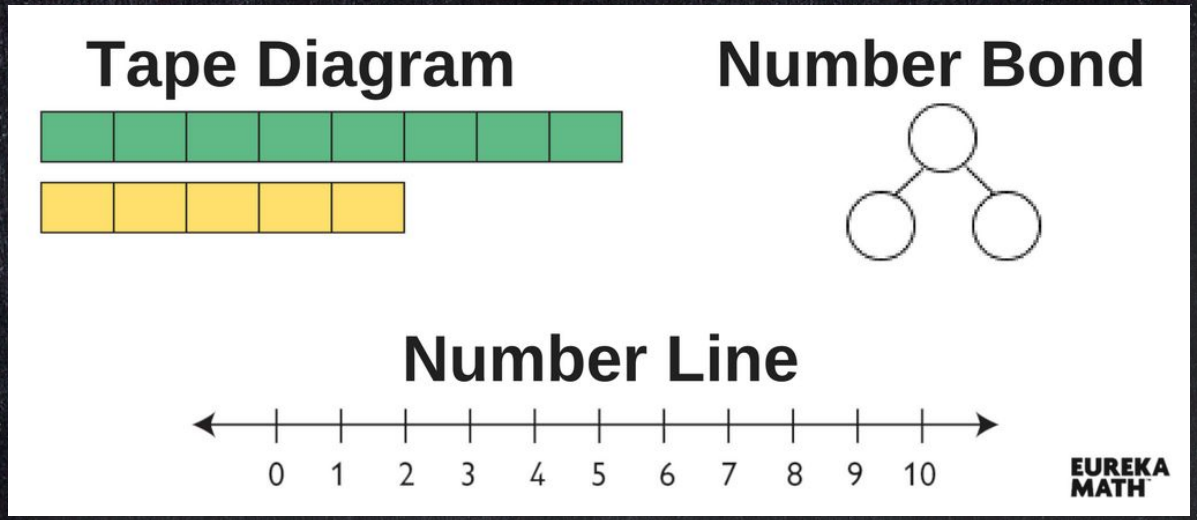
	Pre-K	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Math 4/5	Grade 5	Math 5/6
MP1 **47 Days** **40 PreK Days**	M1: Counting to 5 (38 Days) PK.MD.2 PK.CC.1 PK.CC.2 PK.CC.3 PK.CC.4 PK.OA.2	M1: Numbers to 10 (43 Days) K.MD.B.3 **K.CC.A.3** **K.CC.A.2** **K.CC.B.4** **K.CC.B.5** **K.OA.A.1** **K.OA.A.3**	M1: Sums and Differences to 10 (45 Days) **1.OA.A.1** **1.OA.B.3** **1.OA.C.5** **1.OA.C.6** **1.OA.D.7** **1.OA.D.8**	M1: Sums and Differences to 100 (10 Days) **2.OA.A.1** **2.OA.B.2** **2.NBT.B.5**	M1: Properties of Multiplication and Division and Solving Problems with Units of 2-5 and 10 (25 Days) **3.OA.A.1** **3.OA.A.2** **3.OA.A.3** **3.OA.A.4** **3.OA.B.5** **3.OA.B.6** **3.OA.C.7**	M1:Place Value, Rounding, and Algorithms for Addition and Subtraction (25 Days) **4.NBT.A.1** **4.NBT.A.2** **4.NBT.A.3** **4.NBT.B.4** **4.OA.A.3**	G4M1:Place Value, Rounding, and Algorithms for Addition and Subtraction (14 Days) **4.NBT.A.1** **4.NBT.A.2** **4.NBT.A.3** **4.NBT.B.4** **4.OA.A.3**	M1: Place Value and Decimal Fractions (20 days) **5.NBT.A.1** **5.NBT.A.2** **5.NBT.A.3** **5.NBT.B.7** 5.MD.A.1	G5M4:Multiplication and Division of Fractions and Decimal Fractions (29 days) 5.OA.A.1 5.OA.A.2 **5.NBT.B.7** **5.NF.B.3** **5.NF.B.4** **5.NF.B.5** **5.NF.B.6** **5.NF.B.7** 5.MD.A.1 5.MD.B.2
				M2: Addition and Subtraction of Length (12 days) 2.MD.A.1 2.MD.A.2 2.MD.A.3 2.MD.A.4 2.MD.B.5 2.MD.B.6		M2: Unit Conversions and Problem Solving with Metric Measurement (7 Days) 4.MD.A.1 4.MD.A.2	G4M2: Unit Conversions and Problem Solving with Metric Measurement (6 Days) 4.MD.A.1 4.MD.A.2	M2: Multi-Digit Whole Number and Decimal Fraction Operations (25 days) **5.NBT.A.1** **5.NBT.A.2** **5.NBT.B.5** **5.NBT.B.6** **5.NBT.B.7** 5.MD.A.1 5.OA.A.1 5.OA.A.2	
		M2: Two-Dimensional and Three-Dimensional Shapes (2 Days) K.G.A.1 K.G.A.2 K.G.A.3 K.G.B.4 K.MD.B.3		M3: Place Value, Counting, and Comparison of Numbers to 1000 (23 Days) **2.NBT.A.1** **2.NBT.A.2** **2.NBT.A.3** **2.NBT.A.4** **2.NBT.B.8**	M2: Place Value and Problem Solving with Units of Measure (20 Days) **3.MD.A.1** **3.MD.A.2** 3.NBT.A.1 3.NBT.A.2	M3: Multi-digit Multiplication and Division (13 Days) **4.OA.A.1** **4.OA.A.2** **4.OA.A.3** 4.OA.B.4 4.OA.C.5 **4.NBT.A.1** **4.NBT.B.5** **4.NBT.B.6** 4.MD.A.3	G4M3: Multi-digit Multiplication and Division (26 Days) **4.OA.A.1** **4.OA.A.2** **4.OA.A.3** 4.OA.B.4 4.OA.C.5 **4.NBT.A.1** **4.NBT.B.5** **4.NBT.B.6** 4.MD.A.3		G5M5: Addition & Multiplication with Volume and Area (17 days) **5.NF.B.4** **5.NF.B.6** **5.MD.C.3** **5.MD.C.4** **5.MD.C.5** 5.G.B.3 5.G.B.4

Year Long Overview

Numbers in base ten is the largest standard from grades K - 2.

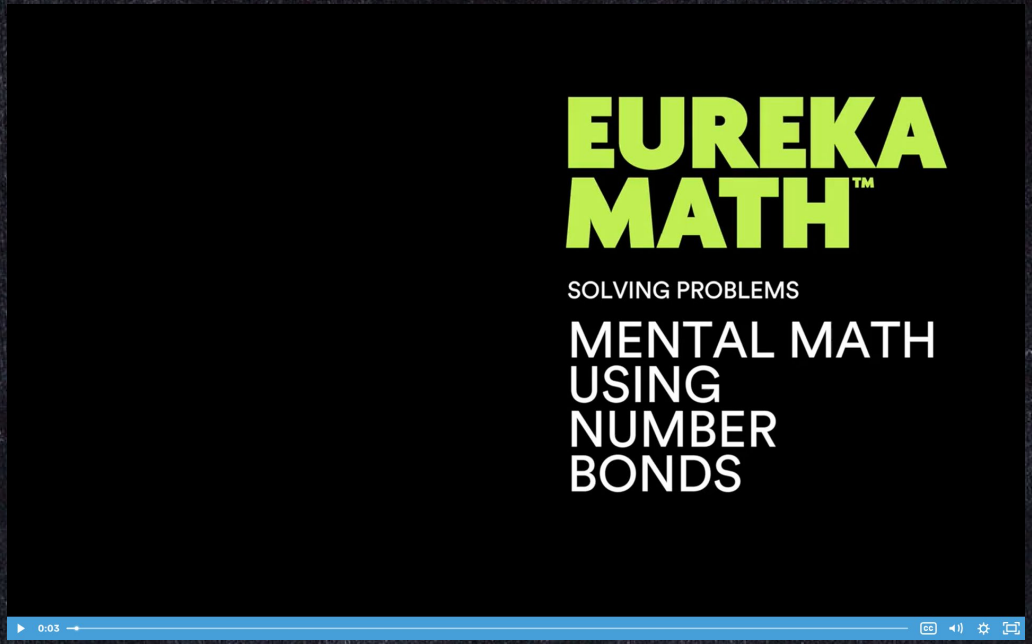


Eureka Models



Eureka Models: Number Bond Example

Add 997 + 338



Eureka Assessments

Exit tickets

- Are given daily and used to assess student learning for the day
- They ARE NOT graded
- You will see them come home each week

Topic Quizzes

- Are teacher created
- Given at the end of a topic for students to demonstrate their mastery with that standard
- They ARE graded

Mid & End of Module Assessments

- Given at the mid and end of a module
- They ARE graded on a 1-4 scale with a rubric
- Each step on the scale describes the qualities expected of student work at that level

Westover's Math Story

Math Data

Traditionally, our students have performed better on ELA than math.

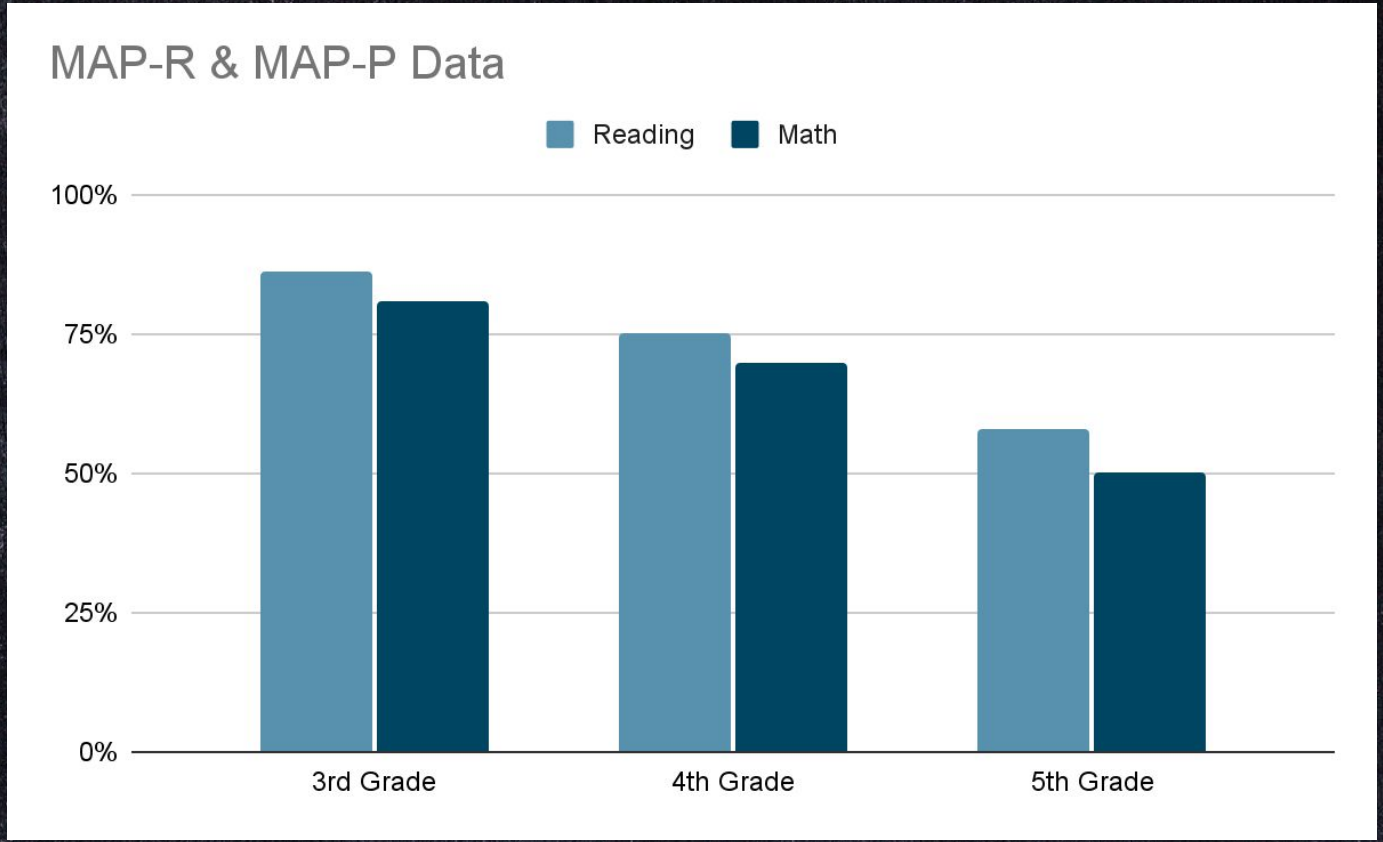
Math is Everywhere!

What we are doing to help students increase their math proficiency

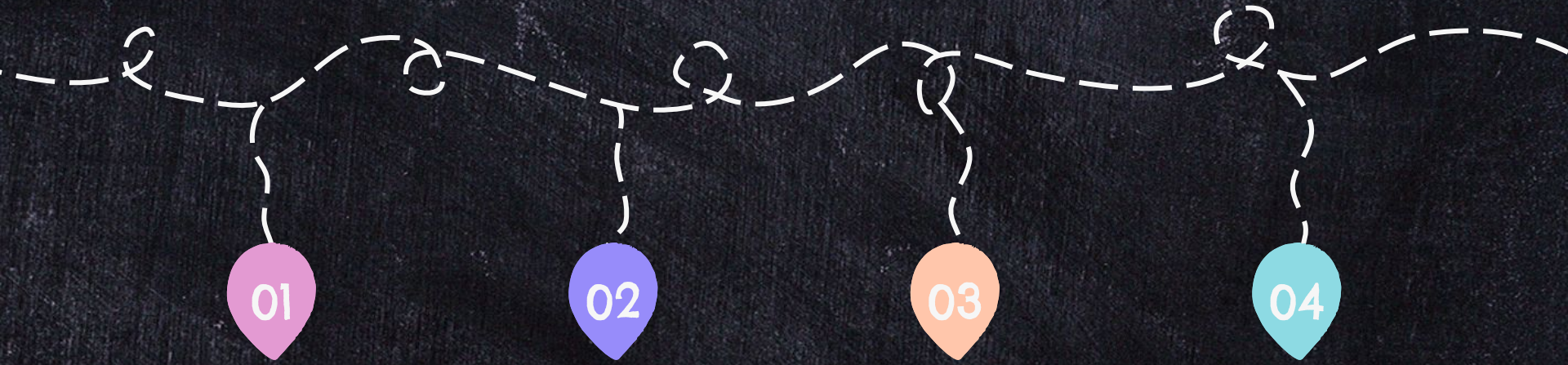
Family Support

Resources for families to support math at home

Reading vs. Math Data



What We Are Doing About It



01

Math is a school wide focus with daily fact fluency practice.

02

Teachers are planning collective learning experiences for students

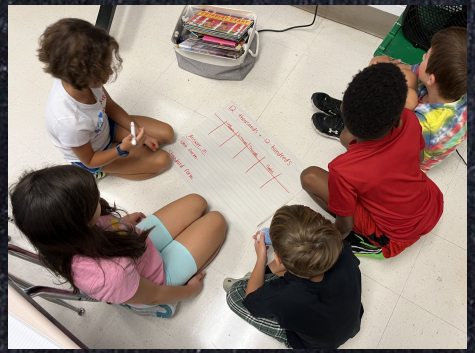
03

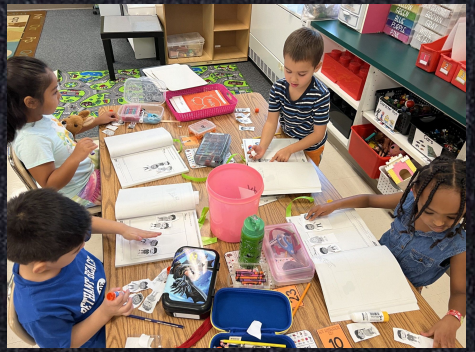
Teachers are analyzing data weekly and doing the math at planning.

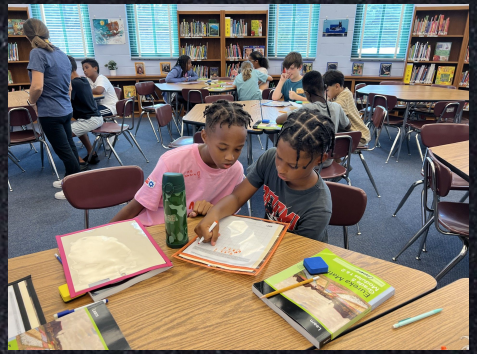
04

Walkthroughs & peer visits will take place during math this year.

Math is EVERYWHERE!





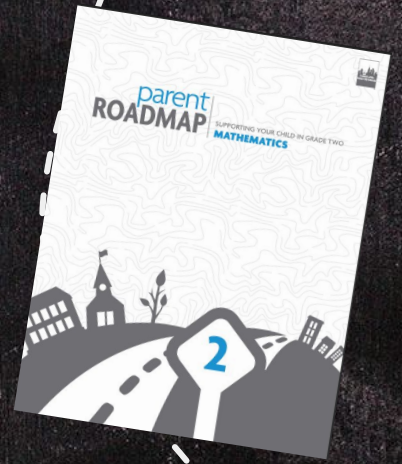


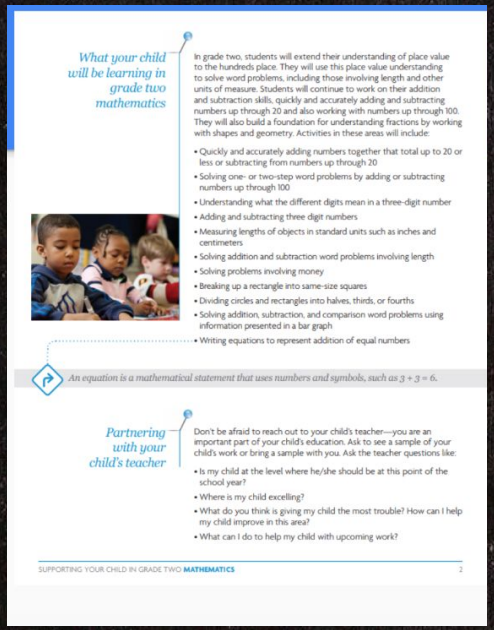
Focus on Major Work at Each Grade Level

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Representing, comparing, and composing numbers 0-10	Addition and Subtraction within 20	Addition and Subtraction within 100	Multiplication and Division within 100	Multi-Digit Multiplication and Division & understanding fraction equivalence and ordering	Adding, subtracting, multiplying, and dividing fractions

Resources for Families

Grade level specific road maps





What your child will be learning in grade two mathematics

In grade two, students will extend their understanding of place value to the hundreds place. They will use this place value understanding to solve word problems, including those involving length and other units of measure. Students will continue to work on their addition and subtraction skills, quickly and accurately adding and subtracting numbers up through 20 and also working with numbers up through 100. They will also build a foundation for understanding fractions by working with shapes and geometry. Activities in these areas will include:

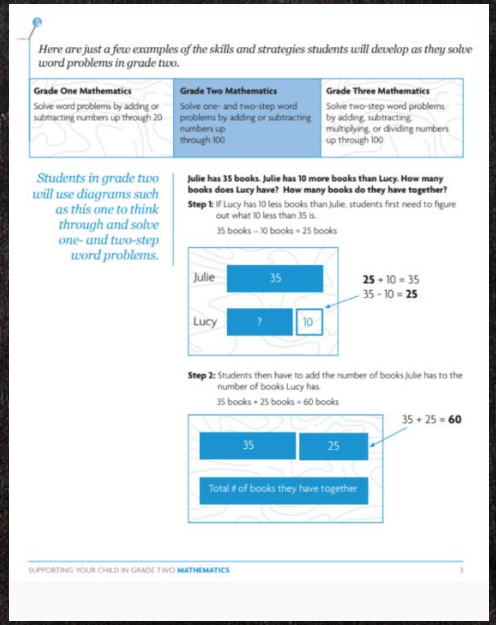
- Quickly and accurately adding numbers together that total up to 20 or less or subtracting from numbers up through 20
- Solving one- or two-step word problems by adding or subtracting numbers up through 100
- Understanding what the different digits mean in a three-digit number
- Adding and subtracting three digit numbers
- Measuring lengths of objects in standard units such as inches and centimeters
- Solving addition and subtraction word problems involving length
- Solving problems involving money
- Breaking up a rectangle into same-size squares
- Dividing circles and rectangles into halves, thirds, or fourths
- Solving addition, subtraction, and comparison word problems using information presented in a bar graph
- Writing equations to represent addition of equal numbers

An equation is a mathematical statement that uses numbers and symbols, such as 3 + 3 = 6.

Partnering with your child's teacher

Don't be afraid to reach out to your child's teacher—you are an important part of your child's education. Ask to see a sample of your child's work or bring a sample with you. Ask the teacher questions like:

- Is my child at the level where he/she should be at this point of the school year?
- Where is my child excelling?
- What do you think is giving my child the most trouble? How can I help my child improve in this area?
- What can I do to help my child with upcoming work?



Here are just a few examples of the skills and strategies students will develop as they solve word problems in grade two.

Grade One Mathematics	Grade Two Mathematics	Grade Three Mathematics
Solve word problems by adding or subtracting numbers up through 20	Solve one- and two-step word problems by adding or subtracting numbers up through 100	Solve two-step word problems by adding, subtracting, multiplying, or dividing numbers up through 100

Students in grade two will use diagrams such as this one to think through and solve one- and two-step word problems.

Julie has 35 books. Julie has 10 more books than Lucy. How many books does Lucy have? How many books do they have together?

Step 1: If Lucy has 10 less books than Julie, students first need to figure out what 10 less than 35 is.

35 books – 10 books = 25 books

Step 2: Students then have to add the number of books Julie has to the number of books Lucy has.

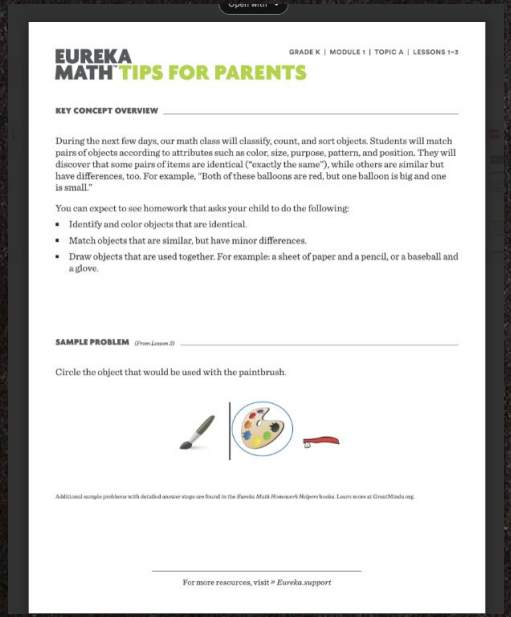
35 books + 25 books = 60 books

Resources for Families

Parent Tip Sheets

Key concept overview

Sample problem



EUREKA MATH™ TIPS FOR PARENTS

GRADE K | MODULE 1 | TOPIC A | LESSONS 1–3

KEY CONCEPT OVERVIEW

During the next few days, our math class will classify, count, and sort objects. Students will match pairs of objects according to attributes such as color, size, purpose, pattern, and position. They will discover that some pairs of items are identical ("exactly the same"), while others are similar but have differences, too. For example, "Both of these balloons are red, but one balloon is big and one is small."

You can expect to see homework that asks your child to do the following:

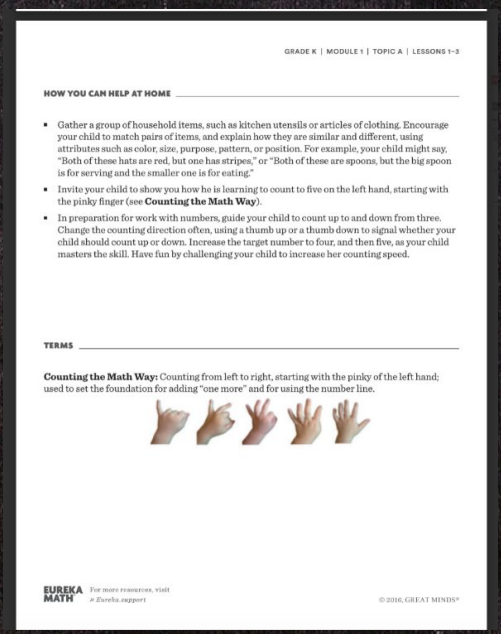
- Identify and color objects that are identical.
- Match objects that are similar, but have minor differences.
- Draw objects that are used together. For example: a sheet of paper and a pencil, or a baseball and a glove.

SAMPLE PROBLEM *(From Lesson 2)*

Circle the object that would be used with the paintbrush.

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

For more resources, visit » *Eureka.support*



GRADE K | MODULE 1 | TOPIC A | LESSONS 1–3

HOW YOU CAN HELP AT HOME

- Gather a group of household items, such as kitchen utensils or articles of clothing. Encourage your child to match pairs of items, and explain how they are similar and different, using attributes such as color, size, purpose, pattern, or position. For example, your child might say, "Both of these hats are red, but one has stripes," or "Both of these are spoons, but the big spoon is for serving and the smaller one is for eating."
- Invite your child to show you how he is learning to count to five on the left hand, starting with the pinky finger (see **Counting the Math Way**).
- In preparation for work with numbers, guide your child to count up to and down from three. Change the counting direction often, using a thumb up or a thumb down to signal whether your child should count up or down. Increase the target number to four, and then five, as your child masters the skill. Have fun by challenging your child to increase her counting speed.

TERMS

Counting the Math Way: Counting from left to right, starting with the pinky of the left hand; used to set the foundation for adding "one more" and for using the number line.

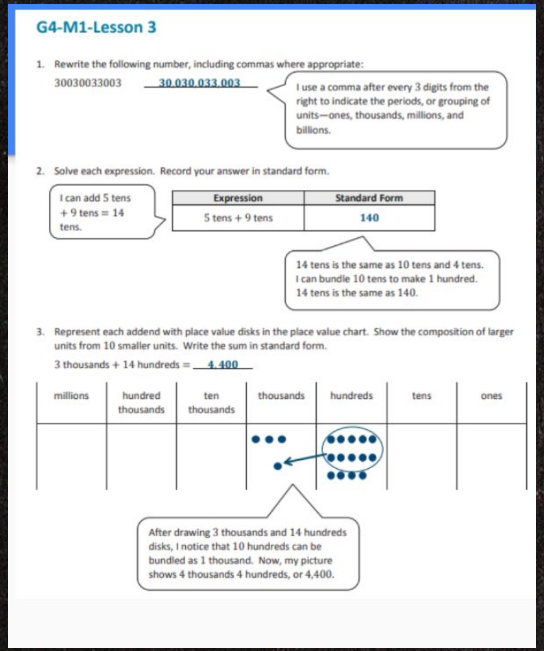
EUREKA MATH For more resources, visit » *Eureka.support*

How you can help at home

Key terms

Resources for Families

Homework Helpers



G4-M1-Lesson 3

1. Rewrite the following number, including commas where appropriate:

   30030033003 **30,030,033,003**

   I use a comma after every 3 digits from the right to indicate the periods, or grouping of units—ones, thousands, millions, and billions.

2. Solve each expression. Record your answer in standard form.

   I can add 5 tens + 9 tens = 14 tens.

Expression	Standard Form
5 tens + 9 tens	**140**

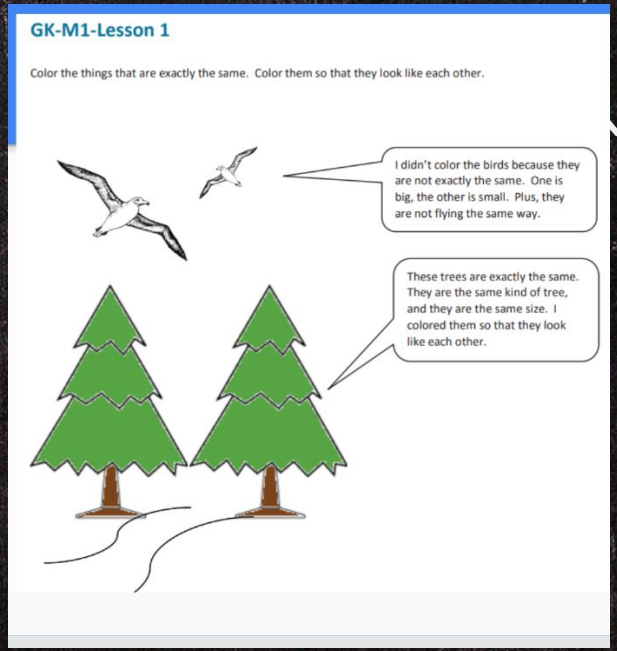
   14 tens is the same as 10 tens and 4 tens. I can bundle 10 tens to make 1 hundred. 14 tens is the same as 140.

3. Represent each addend with place value disks in the place value chart. Show the composition of larger units from 10 smaller units. Write the sum in standard form.

   3 thousands + 14 hundreds = **4,400**

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
			●●●	●●●●● ●●●●● ●●●●		

After drawing 3 thousands and 14 hundreds disks, I notice that 10 hundreds can be bundled as 1 thousand. Now, my picture shows 4 thousands 4 hundreds, or 4,400.



GK-M1-Lesson 1

Color the things that are exactly the same. Color them so that they look like each other.

I didn't color the birds because they are not exactly the same. One is big, the other is small. Plus, they are not flying the same way.

These trees are exactly the same. They are the same kind of tree, and they are the same size. I colored them so that they look like each other.

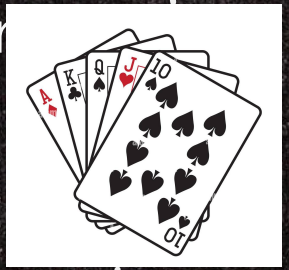
Online Resources

- Great Minds Website
- Zearn.org
- MCPS Parent Resources Page
  - Family Math Support Center

Before You Go...

Please take the Math Resources Page with QR codes to:

- The Road Map for your child's grade level.
- The Eureka Math Card Games that includes 12 games for skill levels from Grades K–12, all with an educational math twist. All you need is a deck of car to play!



And remember, we are **ALL** math people!!!